

ABSTRACT OF THE DISCLOSURE

There is provided a method of manufacturing a semiconductor device having a TFT with sufficient characteristics and little fluctuation by accurately controlling the addition amount of impurity ions to the semiconductor layer using an ion doping device. A semiconductor device having a TFT showing sufficient and stable characteristics may be obtained by increasing the ratio of the dopant amount in the doping gas and decreasing the ambient atmosphere components (C, N, O) and hydrogen to be simultaneously added with the impurity ions at the time of doping.